AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1. (currently amended) A system comprising:

a bus; and

a plurality of agents coupled to said bus, each of the plurality of agents configured to arbitrate for said bus, ~~and~~ but wherein ~~a predetermined first agent of said plurality of agents is~~ only one of said plurality of agents is selected as a predetermined default agent to be alone given default grant of said bus without arbitrating, if no other of said plurality of agents arbitrates for said bus, wherein said ~~first~~ default agent is also an arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by the system, and wherein said arbitration scheme includes an arbitration priority of said plurality of agents, ~~and wherein~~ in which said ~~first~~ default agent is changed from a current priority in said arbitration priority to a ~~lowest~~ lower priority in said arbitration priority in response to using said bus by default grant.

2. (currently amended) The system as recited in claim 1 wherein said ~~first~~ default agent is to be given default grant independent of which of said plurality of agents was last to use said bus.

3. (currently amended) The system as recited in claim 1 further comprising a plurality of request signals, each of said plurality of request signals corresponding to a respective agent of said plurality of agents and used by said respective agent to indicate whether or not said respective agent is arbitrating for said bus, and wherein said ~~first~~ default agent is coupled to receive at least one of said plurality of request signals corresponding to other ones of said plurality of agents, and wherein said ~~first~~ default agent is configured to determine if none of said plurality of agents is arbitrating responsive to said plurality of request signals.

4. (currently amended) The system as recited in claim 1 wherein said bus is a split transaction bus including an address bus and a data bus, and wherein said ~~first~~ default agent is to be given default grant of said data bus responsive to no other of said plurality of agents arbitrating for said data bus.

5. (currently amended) The system as recited in claim 1 wherein said ~~first~~ default agent is configured to use said bus responsive to being given default grant, only if said ~~first~~ default agent has information to transfer on said bus.

6. (currently amended) The system as recited in claim 1 wherein said ~~first~~ default agent is configured to arbitrate for said bus if at least one other of said plurality of agents is arbitrating for said bus during said arbitration and said ~~first~~ default agent has information to transfer on said bus.

7. (canceled)

8. (previously presented) The system as recited in claim 1 further comprising one or more arbiters configured to perform said arbitration, wherein said one or more arbiters are configured to maintain a state indicative of said arbitration priority of said plurality of agents, and wherein an agent winning an arbitration is changed to lowest priority in said arbitration priority.

9. (canceled)

10. (currently amended) An arbiter for a bus comprising:

a first circuit coupled to receive a plurality of request signals, each of said plurality of request signals corresponding to a respective agent of a plurality of agents coupled to said bus and indicative of whether or not said respective agent is arbitrating for said bus, wherein said first circuit is configured to grant default use of said bus without arbitration to a ~~first~~ predetermined default agent selected as an only agent from said plurality of agents for lone use of the default grant, if no other of said plurality of

agents is arbitrating for said bus, ~~said first agent predetermined to be granted default use of said bus without arbitrating, if no other of said plurality of agents is arbitrating for said bus,~~ wherein said ~~first~~ default agent is an arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by said plurality of agents, and wherein said arbitration scheme includes an arbitration priority of said plurality of agents, ~~and wherein~~ but in which said ~~first~~ default agent is changed from a current priority in said arbitration priority to a ~~lowest~~ lower priority in said arbitration priority in response to using said bus granted in response to none of said plurality of agents arbitrating for said bus.

11. (currently amended) The arbiter as recited in claim 10 wherein said first circuit is configured to grant default use of said bus to said ~~first~~ default agent independent of which of said plurality of agents was last to use said bus.

12. (currently amended) The arbiter as recited in claim 10 wherein said bus is a split transaction bus including an address bus and a data bus, and wherein said ~~first~~ default agent is granted use of said data bus responsive to none of said plurality of agents arbitrating for said data bus.

13. (currently amended) The arbiter as recited in claim 10 further comprising a second circuit configured to determine if said ~~first~~ default agent wins an arbitration for said bus if at least one of said plurality of agents is arbitrating for said bus, and wherein said second circuit is configured to determine if said ~~first~~ default agent wins said arbitration according to said arbitration scheme.

14. (currently amended) The arbiter as recited in claim 10 further comprising a storage coupled to said second circuit, said storage storing an indication of the relative priority of said other ones of said plurality of agents to said ~~first~~ default agent, and wherein a winner of said arbitration is updated to lowest priority.

15. (canceled)

16. (currently amended) A method comprising:

granting default use of a bus to a ~~first~~ predetermined default agent of a plurality of agents responsive to none of said plurality of agents arbitrating for said bus, said ~~first~~ default agent ~~predetermined~~ selected as an only default agent from said plurality of agents to be alone granted default use of said bus without arbitrating, if no other of said plurality of agents is arbitrating for said bus, wherein said ~~first~~ default agent is an arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by said plurality of agents;

said ~~first~~ default agent using said bus in response to said granting of default use; and

changing an arbitration priority of said arbitration scheme in response to said ~~first~~ default agent using said bus, said ~~first~~ default agent changed from a current priority to a ~~lowest~~ lower priority in said arbitration priority.

17. (previously presented) The method as recited in claim 16 wherein said granting of default use is independent of which of said plurality of agents was last to use said bus.

18. (original) The method as recited in claim 16 further comprising:

receiving a plurality of request signals, each of said plurality of request signals corresponding to a respective agent of said plurality of agents and indicative of whether or not said respective agent is arbitrating for said bus; and

determining that none of said plurality of agents is arbitrating responsive to said plurality of request signals.

19. (currently amended) The method as recited in claim 16 wherein said bus is a split transaction bus including an address bus and a data bus, and wherein said granting comprises granting default use of said data bus to said ~~first~~ default agent.

20. (currently amended) The method as recited in claim 16 further comprising using said bus by said ~~first~~ default agent in response to said granting only if said ~~first~~ default agent

has information to transfer on said bus.

21. (currently amended) The method as recited in claim 20 further comprising arbitrating for said bus by said ~~first~~ default agent if one or more other ones of said plurality of agents are arbitrating.

22. (previously presented) The method as recited in claim 21 further comprising determining a winner of an arbitration according to said arbitration scheme.

23. (canceled)

24. (currently amended) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including a system comprising:

a bus; and

a plurality of agents coupled to said bus, each of the plurality of agents configured to arbitrate for said bus, ~~and~~ but wherein ~~a predetermined first agent of said plurality of agents is a~~ only one of said plurality of agents is selected as a predetermined default agent to be alone given default grant of said bus without arbitrating, if no other of said plurality of agents arbitrates for said bus, wherein said ~~first~~ default agent is also an arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by the system, and wherein said arbitration scheme includes an arbitration priority of said plurality of agents, ~~and wherein~~ in which said ~~first~~ default agent is changed from a current priority in said arbitration priority to a ~~lowest~~ lower priority in said arbitration priority in response to using said bus by default grant.

25. (currently amended) The carrier medium as recited in claim 24 wherein said ~~first~~ default agent is to be given default grant independent of which of said plurality of agents was last to use said bus.

26. (currently amended) The carrier medium as recited in claim 24 wherein said bus is a split transaction bus including an address bus and a data bus, and wherein said ~~first~~ default agent is to be given default grant of said data bus responsive to no other of said plurality of agents arbitrating for said data bus.

27. (currently amended) The carrier medium as recited in claim 24 wherein said ~~first~~ default agent is configured to use said bus responsive to being given default grant, only if said ~~first~~ default agent has information to transfer on said bus.

28. (previously presented) The carrier medium as recited in claim 24 further comprising one or more arbiters configured to perform said arbitration, wherein said one or more arbiters are configured to maintain a state indicative of said arbitration priority of said plurality of agents, and wherein an agent winning an arbitration is changed to lowest priority in said arbitration priority.

29. (canceled)

30. (currently amended) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including an arbiter for a bus, the arbiter comprising:

a first circuit coupled to receive a plurality of request signals, each of said plurality of request signals corresponding to a respective agent of a plurality of agents coupled to said bus and indicative of whether or not said respective agent is arbitrating for said bus, wherein said first circuit is configured to grant default use of said bus without arbitrating to a ~~first~~ predetermined default agent selected as an only agent from said plurality of agents for lone use of the default grant, if no other of said plurality of agents is arbitrating for said bus, ~~said first agent predetermined to be granted default use of said bus without arbitrating if no other of said plurality of agents is arbitrating for said~~

~~bus,~~ wherein said ~~first~~ default agent is an arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by said plurality of agents, and wherein said arbitration scheme includes an arbitration priority of said plurality of agents, ~~and wherein~~ in which said ~~first~~ default agent is changed from a current priority in said arbitration priority to a ~~lowest~~ lower priority in said arbitration priority in response to using said bus granted in response to none of said plurality of agents arbitrating for said bus.

31. (currently amended) The carrier medium as recited in claim 30 wherein said first circuit is configured to grant default use of said bus to said ~~first~~ default agent independent of which of said plurality of agents was last to use said bus.

32. (currently amended) The carrier medium as recited in claim 30 wherein said bus is a split transaction bus including an address bus and a data bus, and wherein said ~~first~~ default agent is granted use of said data bus responsive to no other of said plurality of agents arbitrating for said data bus.

33. (currently amended) The carrier medium as recited in claim 30 further comprising a storage configured to store an indication of the relative priority of said other ones of said plurality of agents to said ~~first~~ default agent, and wherein a winner of said arbitration is updated to lowest priority.

34. (canceled)

35. (currently amended) The system as recited in claim 1 wherein said ~~first~~ default agent is configured to drive said bus responsive to being given default grant even if said ~~first~~ default agent has no information to transfer on said bus.

36. (previously presented) The system as recited in claim 1 wherein said arbitration priority is changed in response to any one of the plurality of agents using said bus.

37. (currently amended) The system as recited in claim 36 wherein said one of said plurality of agents using said bus is changed to ~~said~~ a lowest priority.

38. (previously presented) The arbiter as recited in claim 10 wherein said arbitration priority is changed in response to any one of the plurality of agents using said bus.

39. (currently amended) The arbiter as recited in claim 38 wherein said one of said plurality of agents using said bus is changed to ~~said~~ a lowest priority.

40. (currently amended) The method as recited in claim 16 further comprising driving said bus by said ~~first~~ default agent in response to said granting even if said ~~first~~ default agent has no information to transfer on said bus.

41. (currently amended) The carrier medium as recited in claim 24 wherein said ~~first~~ default agent is configured to drive said bus responsive to being given default grant even if said ~~first~~ default agent has no information to transfer on said bus.

42. (previously presented) The carrier medium as recited in claim 24 wherein said arbitration priority is changed in response to any one of the plurality of agents using said bus.

43. (currently amended) The carrier medium as recited in claim 42 wherein said one of said plurality of agents using said bus is changed to ~~said~~ a lowest priority.

44. (previously presented) The carrier medium as recited in claim 30 wherein said arbitration priority is changed in response to any one of the plurality of agents using said bus.

45. (currently amended) The carrier medium as recited in claim 44 wherein said one of said plurality of agents using said bus is changed to ~~said~~ a lowest priority.